

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

Claims 1-49 (Canceled)

Claim 50 (New) A method for treating and/or preventing restenosis in a mammal, comprising administering to the mammal a composition comprising a nucleic acid encoding extracellular superoxide dismutase in an amount sufficient to reduce and/or prevent restenosis.

Claim 51 (New) A method according to claim 50, wherein the composition is administered by local or systemic delivery.

Claim 52 (New) A method according to claim 50, wherein the nucleic acid is present in a biologically compatible medium in naked form.

Claim 53 (New) A method according to claim 50, wherein the nucleic acid is in a viral vector selected from the group consisting of retrovirus, Sendai virus, adeno-associated virus and adenovirus.

Claim 54 (New) A method according claim 50, wherein the nucleic acid is present in a liposome.

Claim 55 (New) A method according to claims 52, wherein the biologically compatible medium is a biostable polymer, a bioabsorbable polymer, a biomolecule, a hydrogel polymer or fibrin.

Claim 56 (New) A method according to claim 50, wherein the step of administering the composition is repeated at least once.

Claim 57 (New) A method according to claim 50, wherein the mammal is a human.

Claim 58 (New) A method for treating and/or preventing blood vessel thickening in a mammal, comprising administering to the mammal a composition comprising a nucleic acid encoding extracellular superoxide dismutase in an amount sufficient to reduce and/or prevent blood vessel thickening.

Claim 59 (New) A method according to claim 58, wherein the composition is administered by local or systemic delivery.

Claim 60 (New) A method according to claim 58, wherein the nucleic acid is present in a biologically compatible medium in naked form.

Claim 61 (New) A method according to claim 58, wherein the nucleic acid is in a viral vector selected from the group consisting of retrovirus, Sendai virus, adeno-associated virus and adenovirus.

Claim 62 (New) A method according claim 58, wherein the nucleic acid is present in a liposome.

Claim 63 (New) A method according to claims 60, wherein the biologically compatible medium is a biostable polymer, a bioabsorbable polymer, a biomolecule, a hydrogel polymer or fibrin.

Claim 64 (New) A method according to claim 58, wherein the step of administering the composition is repeated at least once.

Claim 65 (New) A method according to claim 58, wherein the mammal is a human.

Claim 66 (New) A method for treating and/or preventing restenosis in a mammal, comprising administering to the mammal a composition comprising an extracellular superoxide dismutase in an amount sufficient to reduce and/or prevent restenosis.

Claim 67 (New) A method according to claim 66, wherein the composition is administered by local or systemic delivery.

Claim 68 (New) A method according to claim 66, wherein the nucleic acid is present in a biologically compatible medium in naked form.

Claim 69 (New) A method according to claim 66, wherein the nucleic acid is in a viral vector selected from the group consisting of retrovirus, Sendai virus, adeno-associated virus and adenovirus.

Claim 70 (New) A method according claim 66, wherein the nucleic acid is present in a liposome.

Claim 71 (New) A method according to claims 68, wherein the biologically compatible medium is a biostable polymer, a bioabsorbable polymer, a biomolecule, a hydrogel polymer or fibrin.

Claim 72 (New) A method according to claim 66, wherein the step of administering the composition is repeated at least once.

Claim 73 (New) A method according to claim 66, wherein the mammal is a human.

Claim 74 (New) A method for treating and/or preventing blood vessel thickening in a mammal, comprising administering to the mammal a composition comprising an extracellular superoxide dismutase in an amount sufficient to reduce and/or prevent blood vessel thickening.

Claim 75 (New) A method according to claim 74, wherein the composition is administered by local or systemic delivery.

Claim 76 (New) A method according to claim 74, wherein the nucleic acid is present in a biologically compatible medium in naked form.

Claim 77 (New) A method according to claim 74, wherein the nucleic acid is in a viral vector selected from the group consisting of retrovirus, Sendai virus, adeno-associated virus and adenovirus.

Claim 78 (New) A method according claim 74, wherein the nucleic acid is present in a liposome.

Claim 79 (New) A method according to claims 76, wherein the biologically compatible medium is a biostable polymer, a bioabsorbable polymer, a biomolecule, a hydrogel polymer or fibrin.

Claim 80 (New) A method according to claim 74, wherein the step of administering the composition is repeated at least once.

Claim 81 (New) A method according to claim 74, wherein the mammal is a human.

Claim 82 (New) A method for treating and/or preventing restenosis in a mammal, comprising administering to the mammal a composition comprising a nucleic acid and a biologically compatible medium in an amount sufficient to reduce and/or prevent restenosis, wherein the nucleic acid encodes a translation or transcription product that leads to the production of extracellular superoxide dismutase protein.

Claim 83 (New) A method according to claim 82, wherein the composition is administered by local or systemic delivery.

Claim 84 (New) A method according to claim 82, wherein the nucleic acid is present in naked form.

Claim 85 (New) A method according to claim 82, wherein the nucleic acid is in a viral vector selected from the group consisting of retrovirus, Sendai virus, adeno-associated virus and adenovirus.

Claim 86 (New) A method according claim 82, wherein the nucleic acid is present in a liposome.

Claim 87 (New) A method according to claims 82, wherein the biologically compatible medium is a biostable polymer, a bioabsorbable polymer, a biomolecule, a hydrogel polymer or fibrin.

Claim 88 (New) A method according to claim 82, wherein the step of administering the composition is repeated at least once.

Claim 89 (New) A method according to claim 82, wherein the mammal is a human.

Claim 90 (New). A method for treating and/or preventing blood vessel thickening in a mammal, comprising administering to the mammal a composition comprising a nucleic acid and a biologically compatible medium in an amount sufficient to reduce and/or prevent blood

vessel thickening, wherein the nucleic acid encodes a translation or transcription product that leads to the production of extracellular superoxide dismutase.

Claim 91 (New) A method according to claim 90, wherein the composition is administered by local or systemic delivery.

Claim 92 (New) A method according to claim 90, wherein the nucleic acid is in naked form.

Claim 93 (New) A method according to claim 90, wherein the nucleic acid is in a viral vector selected from the group consisting of retrovirus, Sendai virus, adeno-associated virus and adenovirus.

Claim 94 (New) A method according claim 90, wherein the nucleic acid is present in a liposome.

Claim 95 (New) A method according to claims 90, wherein the biologically compatible medium is a biostable polymer, a bioabsorbable polymer, a biomolecule, a hydrogel polymer or fibrin.

Claim 96 (New) A method according to claim 90, wherein the step of administering the composition is repeated at least once.

Claim 97 (New) A method according to claim 90, wherein the mammal is a human.

Claim 98 (New) A method for decreasing macrophage accumulation in a mammal, comprising administering to the mammal a composition in an amount sufficient to decrease macrophage accumulation, wherein the composition comprises a nucleic acid encoding extracellular superoxide dismutase, an extracellular superoxide dismutase protein, or a nucleic acid present in a biologically compatible medium, wherein the nucleic acid encodes a translation or transcription product that leads to the production of extracellular superoxide dismutase protein.

Claim 99 (New) A method according to claim 98, wherein the composition is administered by local or systemic delivery.

Claim 100 (New) A method according to claim 98, wherein the nucleic acid present in a biologically compatible medium is in naked form.

Claim 101 (New) A method according to claim 98, wherein the nucleic acid is in a viral vector selected from the group consisting of retrovirus, Sendai virus, adeno-associated virus and adenovirus.

Claim 102 (New) A method according claim 98, wherein the nucleic acid is present in a liposome.

Claim 103 (New) A method according to claim 98, wherein the biologically compatible medium is a biostable polymer, a bioabsorbable polymer, a biomolecule, a hydrogel polymer or fibrin.

Claim 104 (New) A method according to claim 98, wherein the step of administering the composition is repeated at least once.

Claim 105 (New) A method according to claim 98, wherein the mammal is a human.

Claim 106 (New) A method for increasing endothelial cell growth in a mammal, comprising administering to the mammal a composition in an amount sufficient to increase endothelial cell growth, wherein the composition comprises a nucleic acid encoding extracellular superoxide dismutase, an extracellular superoxide dismutase protein, or a nucleic acid present in a biologically compatible medium, wherein the nucleic acid encodes a translation or transcription product that leads to the production of extracellular superoxide dismutase protein.

Claim 107 (New) A method according to claim 106, wherein the composition is administered by local or systemic delivery.

Claim 108 (New) A method according to claim 106, wherein the nucleic acid present in a biologically compatible medium is in naked form.

Claim 109 (New) A method according to claim 106, wherein the nucleic acid is in a viral vector selected from the group consisting of retrovirus, Sendai virus, adeno-associated virus and adenovirus.

Claim 110 (New) A method according claim 106, wherein the nucleic acid is present in a liposome.

Claim 111 (New) A method according to claims 106, wherein the biologically compatible medium is a biostable polymer, a bioabsorbable polymer, a biomolecule, a hydrogel polymer or fibrin.

Claim 112 (New) A method according to claim 106, wherein the step of administering the composition is repeated at least once.

Claim 113 (New) A method according to claim 106, wherein the mammal is a human.

Claim 114 (New) A method for inhibition of hyperplastic connective tissue growth and/or promoting endothelialisation in a mammal, comprising administering to the mammal a composition in an amount sufficient to inhibit hyperplastic connective tissue growth and/or promote endothelialisation, wherein the composition comprises a nucleic acid encoding extracellular superoxide dismutase, an extracellular superoxide dismutase protein, or a nucleic acid present in a biologically compatible medium, wherein the nucleic acid encodes a translation or transcription product that leads to the production of extracellular superoxide dismutase protein.

Claim 115 (New) A method according to claim 114, wherein the composition is administered by local or systemic delivery.

Claim 116 (New) A method according to claim 114, wherein the nucleic acid present in a biologically compatible medium is in naked form.

Claim 117 (New) A method according to claim 114, wherein the nucleic acid is in a viral vector selected from the group consisting of retrovirus, Sendai virus, adeno-associated virus and adenovirus.

Claim 118 (New) A method according claim 114 wherein the nucleic acid is present in a liposome.

Claim 119 (New) A method according to claims 114, wherein the biologically compatible medium is a biostable polymer, a bioabsorbable polymer, a biomolecule, a hydrogel polymer or fibrin.

Claim 120 (New) A method according to claim 114, wherein the step of administering the composition is repeated at least once.

Claim 121 (New) A method according to claim 114, wherein the mammal is a human.

Claim 122 (New) A method for inhibiting hyperplastic connective tissue growth, or fibromuscular formation and/or promoting endothelialisation in a mammal, comprising administering to the mammal a composition in an amount sufficient to inhibit hyperplastic connective tissue growth, or fibromuscular formation, and/or promote endothelialisation, wherein the composition comprises a nucleic acid encoding extracellular superoxide dismutase, an extracellular superoxide dismutase protein, or a nucleic acid present in a biologically compatible medium, wherein the nucleic acid encodes a translation or transcription product that leads to the production of extracellular superoxide dismutase protein. ✓

Claim 123 (New) A method according to claim 122, wherein the composition is administered by local or systemic delivery.

Claim 124 (New) A method according to claim 122, wherein the nucleic acid in a biologically compatible medium is present in naked form.

Claim 125 (New) A method according to claim 122, wherein the nucleic acid is in a viral vector selected from the group consisting of retrovirus, Sendai virus, adeno-associated virus and adenovirus.

Claim 126 (New) A method according claim 122, wherein the nucleic acid is present in a liposome.

Claim 127 (New) A method according to claim 122, wherein the biologically compatible medium is a biostable polymer, a bioabsorbable polymer, a biomolecule, a hydrogel polymer or fibrin.

Claim 128 (New) A method according to claim 122, wherein the step of administering the composition is repeated at least once.

Claim 129 (New) A method according to claim 122, wherein the mammal is a human.